

**THE CLAIMS**

1. A flexible connector comprising:
  - a length of corrugated tubing having a distal end;
  - 5 an end piece having a proximal end;
  - a length of polymeric tubing surrounding the distal end of length of corrugated tubing and the proximal end piece for initially retaining the proximal end of the end piece in engagement with the distal end of the length
  - 10 of corrugated tubing; and
  - a sleeve surrounding the length of polymeric tubing, the proximal end of the end piece, and the distal end of the length of corrugated tubing for permanently retaining the proximal end of the end piece in engagement
  - 15 with the distal end of the length of corrugated tubing.
2. The flexible connector according to claim 1 wherein the end piece further comprises a plurality of corrugations comprising the proximal end thereof.

3. The flexible connector according to claim 2 wherein the length of polymeric tubing engages the corrugations of the end piece and the corrugations comprising the distal end of the length of corrugated tubing to retain the proximal end of the end piece in engagement with the distal end of the length of corrugated tubing.

4. The flexible connector according to claim 3 wherein the length of polymeric tubing resiliently engages the proximal end of the end piece and the distal end of the length of corrugated tubing.

5. The flexible connector according to claim 3 wherein the length of polymeric tubing is heat shrunk into engagement with the proximal end of the end piece and the distal end of the length of corrugated tubing.

6. The flexible connector according to claim 1 wherein the sleeve is crimped to permanently retain the proximal end of the end piece in engagement with the distal end of the length of corrugated tubing.

7. The flexible connector according to claim 1 further including a length of mesh tubing surrounding the length of corrugated tubing, the length of polymeric tubing, and the proximal end of the end piece.

5           8. The flexible connector according to claim 7 wherein the end piece further comprises a plurality of corrugations comprising the proximal end thereof.

          9. The flexible connector according to claim 8 wherein the length of polymeric tubing engages the  
10 corrugations of the end piece and the corrugations comprising the distal end of the length of corrugated tubing to retain the proximal end of the end piece in engagement with the distal end of the length of corrugated tubing.

15           10. The flexible connector according to claim 9 wherein the length of polymeric tubing resiliently engages the proximal end of the end piece and the distal end of the length of corrugated tubing.

11. The flexible connector according to claim 9 wherein the length of polymeric tubing is heat shrunk into engagement with the proximal end of the end piece and the distal end of the length of corrugated tubing.

5           12. The flexible connector according to claim 7 wherein the sleeve is crimped to permanently retain the proximal end of the end piece in engagement with the distal end of the length of corrugated tubing.

13. A method of manufacturing a flexible connector comprising the steps of:

providing a length of corrugated tubing having a distal end;

5 providing an end piece having a proximal end;  
positioning the proximal end of the end piece in engagement with the distal end of the length of corrugated tubing;

providing a length of polymeric tubing;

10 extending the length of polymeric tubing over the proximal end of the end piece and the distal end of the length of corrugated tubing;

utilizing the length of polymeric tubing to initially retain the proximal end of the end piece in engagement with the distal end of the length of corrugated tubing;

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providing a sleeve;

positioning the sleeve in alignment with the length of polymeric tubing, with the proximal end of the end piece, and with the distal end of the length of corrugated tubing; and

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crimping the sleeve and thereby permanently retaining the proximal end of the end piece in engagement with the distal end of the length of corrugated tubing.

14. The method according to claim 13 wherein the step  
of providing a length of polymeric tubing is carried out  
by providing a length of flexible polymeric tubing and  
wherein the step of utilizing the length of polymeric  
5 tubing to initially retain the proximal end of the end  
piece in engagement with the distal end of the length of  
corrugated tubing is carried out by resiliently engaging  
the length of resilient polymeric tubing with the proximal  
end of the end piece and with the distal end of the length  
10 of corrugated tubing.

15. The method according to claim 13 wherein the step of providing a length of polymeric tubing is carried out by providing a length of heat shrink polymeric tubing and wherein the step of utilizing the length of polymeric  
5 tubing to initially retain the proximal end of the end piece in engagement with the distal end of the length of corrugated tubing is carried out by directing radiation into the length of heat shrink polymeric tubing and thereby shrinking the length of tubing into engagement with the  
10 proximal end of the end piece and with the distal end of the length of corrugated tubing.

16. The method according to claim 13 including the additional of extending a length of mesh tubing around the exterior of the length of corrugated tubing, around the  
15 proximal end of the end piece, and around the length of polymeric tubing, and wherein the step of positioning the sleeve is carried out by positioning the sleeve around the exterior of the length of mesh tubing.